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09/763,789	02/26/2001	David Emery Virag	RCA 89175	3701

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Joseph S Tripoli
Thomson Multimedia Licensing Inc
PO Box 5312
Princeton, NJ 08540

EXAMINER

SHANNON, MICHAEL R

ART UNIT

PAPER NUMBER

2614

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,789

Applicant(s)

VIRAG ET AL.

Examiner

Michael R. Shannon

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2001.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-13 is/are rejected.
7) ☒ Claim(s) 2 and 12 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 26 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20010226.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities: The claim states "said video apparatus", which does not have proper antecedent basis. This limitation should be corrected to read "said video processing apparatus", as is assumed in the following art rejection. Appropriate correction is required.
2. Claim 12 is objected to because of the following informalities: The claim states "said second peripheral device", which does not have proper antecedent basis. This limitation should be corrected to have proper antecedent basis in the claim, as is assumed in the following art rejection. The claim also states, "to determine one of said analog inputs" in step (d). This limitation should be corrected to read, "to determine which one of said analog inputs", as is assumed in the following art rejection. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Wugofski (USP 6,003,041), cited by examiner.

Regarding claim 1, the claimed "method for controlling a video processing apparatus" is met as follows:

- The claimed step of "commanding a peripheral device, connected to said video processing apparatus, to transmit an analog signal from an analog output of said peripheral device" is met by the main unit 151 request to tune to a channel on a device 120 attached to the system via one of the inputs V1-V4 [col. 6, lines 54-56].
- The claimed step of "receiving said analog signal from said peripheral device on one of a plurality of analog inputs of said video processing apparatus" is met by the ability to receive the valid signal at one of inputs V1-V4 [Figure 1 & col. 6, lines 50-65]].
- The claimed step of "determining which one of said plurality of analog inputs said analog signal is received" is met by the indication of the port number for the input signal [col. 6, line 26].
- The claimed step of "storing data, in said video processing apparatus, associated with said analog input which has received said analog signal" is met by the ability to build a new record of a valid signal in the channel map database [col. 6, lines 61-62].

Regarding claim 2, the claimed "method of Claim 1 wherein the step of commanding comprises sending a message via a digital bus interconnecting said video processing apparatus and said peripheral device, said message controlling said peripheral device to transmit a signal from said analog output" is met by control function

for the connected devices being achieved through an IEEE-1394 standard digital bus [col. 3, lines 25-28].

Regarding claim 3, the claimed "method of claim 2 wherein the step of determining comprises repetitively selecting each one of said analog inputs of aid video processing apparatus to determine which one of said analog inputs received said transmitted signal" is met by the system's ability to scan each input for "valid new channels" among different sources connected to the inputs V1-V4 and for storing channel map database [col. 6, lines 14-65].

Regarding claim 4, the claimed "method of claim 3, wherein more than one peripheral device is connected to said video processing apparatus and the steps of commanding, receiving and storing are repeated until each one of said peripheral devices have been processed" is met by the multiple devices connected to analog inputs V1-V4 and each device is commanded from the main unit 151, via Network 155 and a signal is received via Multiplexer 130 for setting up the device database 350 and the channel map database 370.

Regarding claim 5, the claimed "method of claim 4 further comprising the step of constructing a map of the analog interconnectivity between each peripheral device and said video processing device" is met by device database 350, which serves as a map of A/V equipment interconnections.

Regarding claim 6, the claimed "method of claim 3 wherein said transmitted signal is an analog video blanking signal" is met by the detection of a new "valid signal"

on the analog input of the multiplexer for adding the new valid channel to the channel map database [col. 6, lines 50-65].

Regarding claim 7, the claimed "video processing apparatus is a digital television" is met by the computer system output device being a HDTV [col. 3, lines 29-38].

Regarding claim 8, the claimed "video processing apparatus is a digital set-top box" is met by the computer system being a set-top box [col. 3, lines 29-38].

Regarding claim 9, the claimed "digital bus is an IEEE 1394 serial data bus" is met by the IEEE 1394 bus for transmitting control information [col. 3, lines 25-28].

Regarding claim 10, the claimed "method for defining the interconnectivity of a plurality of peripheral devices to a plurality of analog inputs of a video processing apparatus, said peripheral device also being interconnected via a digital bus to said video processing apparatus" is met as follows:

- The claimed step of "selecting one of said plurality of peripheral devices" is met by the user selecting a peripheral device for configuration in the device database [col. 6, lines 16-33].
- The claimed step of "sending a command, via said digital bus, said selected peripheral device for commanding said selected peripheral device to transmit an analog signal from an analog output of said selected peripheral device" is met by the request for a channel to be received in order to detect a new valid signal [col. 6, lines 50-65].

Art Unit: 2614

- The claimed step of “receiving said analog signal from said selected peripheral device on one of said analog inputs of said video processing device” is met by the reception of a valid new channel on the input multiplexer [col. 6, lines 50-65].
- The claimed step of “monitoring each of said plurality of analog inputs to determine which of said plurality of analog inputs receives said analog signal” is met by the detection of a valid new signal on the input and recording that input and new channel in the channel map database [col. 6, lines 50-65].
- The claimed step of “repeating the steps above for each of the other ones of said plurality of peripheral devices for automatically constructing a map of the analog interconnectivity of each peripheral device connected to said video processing apparatus” is met by the multiple devices connected to analog inputs V1-V4 and each device is commanded from the main unit 151, via Network 155 and a signal is received via Multiplexer 130 for setting up the device database 350 and the channel map database 370.

Regarding claim 11, the claimed “digital bus is an IEEE 1394 serial data bus” is met by the IEEE 1394 bus 155 for transmitting control information from the main unit 151 to the devices 110 [col. 3, lines 25-28].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2614

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wugofski (USP 6,003,041), cited by examiner.

Regarding claim 12, the claimed "method for configuring a video processing apparatus having an analog input and interconnected via a digital bus to at least two peripheral devices" is met as follows:

- The claimed step of "sending a first command, via said digital bus, to said first peripheral device to switch said first peripheral device into pass-through operating mode" is not specifically taught by Wugofski. Wugofski teaches sending a control signal over a digital bus to a peripheral device, however, does not teach the control signal putting the device into pass-through mode. The Examiner takes Official Notice that it is notoriously well known in the art to place devices in pass-through mode for passing a signal from one source through another source (for example, sending a STB signal through a VCR for recording purposes, or sending a VCR signal through a STB/tuner for modulation onto channel 3 or 4).

Therefore, the examiner submits that it would have been obvious to one of ordinary skill in the art at the time of the invention to include a step for placing a device in pass-through mode, in order to allow the device to pass a signal through another device and onto the analog input of the receiving/commanding device.

- The claimed step of “sending a second command, via said digital bus, to said second peripheral device to transmit an analog signal from an analog output of said second peripheral device” is met by the request for a channel to be received in order to detect a new valid signal [col. 6, lines 50-65].
- The claimed step of “receiving said analog signal from said second peripheral device on one of said analog inputs of said video processing apparatus” is met by the reception of a valid new channel on the input multiplexer [col. 6, lines 50-65].
- The claimed step of “monitoring each of said analog inputs to determine one of said analog inputs receives said analog signal” is met by the detection of a valid new signal on the input and recording that input and new channel in the channel map database [col. 6, lines 50-65].

Regarding claim 13, the claimed “digital bus is an IEEE 1394 serial data bus” is met by the IEEE 1394 bus 155 for transmitting control information from the main unit 151 to the devices 110 [col. 3, lines 25-28].

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ogino et al (USP 6,038,625) disclose a digital HAVI network for discovering network topology using digital signals and GUID location information.

Broberg (USP 6,529,680) discloses a device similar to that of the Wugofski reference for creating and maintaining a channel map for a multi-input device. Of particular interest is column 5, lines 54-64.

Wheeler et al (USP 6,675,383) disclose a system for auto-detecting what signal source a display signal originated from by comparing a displayed signal source to a received signal source.

8. References made of record but not necessarily prior art due to invalid priority dates.

Hara (USP 6,453,364) discloses a system for switching between analog and digital connections in a network management and reception device.

Matsushita et al (US Pub. No. 2002/0016973) disclose a similar system for automatically determining which of a plurality of signals output from an apparatus is effective.

Noda et al (US Pub. No. 2004/0268415) disclose a system for notifying the display device of an analog input terminal number for proper display of an analog signal (has an IEEE 1394 bus).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R. Shannon whose telephone number is (571) 272-7356. The examiner can normally be reached Monday through Friday 8:00 AM – 5:00PM, with alternate Friday's off.

Art Unit: 2614

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at (571) 272-7353.

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Art Unit: 2614

Alexandria, VA 22314

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **(571) 272-2600**.

Michael R Shannon
Examiner
Art Unit 2614

Michael R Shannon
April 29, 2005



JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600